

# Patent [19]

[11] Patent Number: 09135891

[45] Date of Patent: May. 27, 1997

---

## [54] DEODORIZING DEVICE

[21] Appl. No.: 07319479 JP07319479 JP

[22] Filed: Nov. 14, 1995

[51] Int. Cl.<sup>6</sup> A61L00918 ; F24F00100

## [57] ABSTRACT

**PROBLEM TO BE SOLVED:** To enhance the deodorizing efficiency by forming a photocatalyst carrier in a honeycomb structure having a certain width in a main air flowing direction, and ensuring an air passage, and by forming an exciting light source in a cylindrical shape extending in the main air flowing direction.

**SOLUTION:** A casing 1 is provided at its one end with a suction port 2 and in the vicinity of the other end with a discharge port 3. A dust-preventing filter 4 is provided in the suction port 2. Further, an ultraviolet ray lamp 5 as a cylindrical exciting light source is laid along the center axis of the casing 1. Photo-catalyst ring-like carriers 12 are arranged at predetermined intervals in the casing 1. Each carrier 12 is composed of several short cylindrical members having different diameters and laminated with one another around the ultraviolet ray lamp 5, and substantially semicircular gaps are formed between the cylindrical members so as to form a honeycomb structure. Air can flow through these gaps. Further, several pores are formed each of the cylindrical member, and accordingly, exciting light can uniformly distributed.

\*\*\*\*\*